

Date: Monday, 3/17/2008 11:56:46 AM
 User: Kim Johnston

Process Sheet

SPLIT-2

Customer	: CU-DAR001 Dart Helicopters Services			Drawing Name	: STEP EXTRUSION		
Job Number	: 38023			Part Number	: D2244116		
Estimate Number	: 10113			Drawing Number	: D2244 REV D1		
P.O. Number	:			Project Number	: N/A		
This Issue	: 3/17/2008	S.O. No.	:	Drawing Revision	: D1		
Prsht Rev.	: NC			Material	:		
First Issue	: / /	Type	: PURCHASED PARTS	Due Date	: 4/20/2008	Qty:	110 Um: Each
Previous Run	: 33733						
Written By	:						
Checked & Approved By	: <i>JH</i> 03 17						
Comment	: Est: A 240304 New Issue KJ						

Additional Product

Job Number:

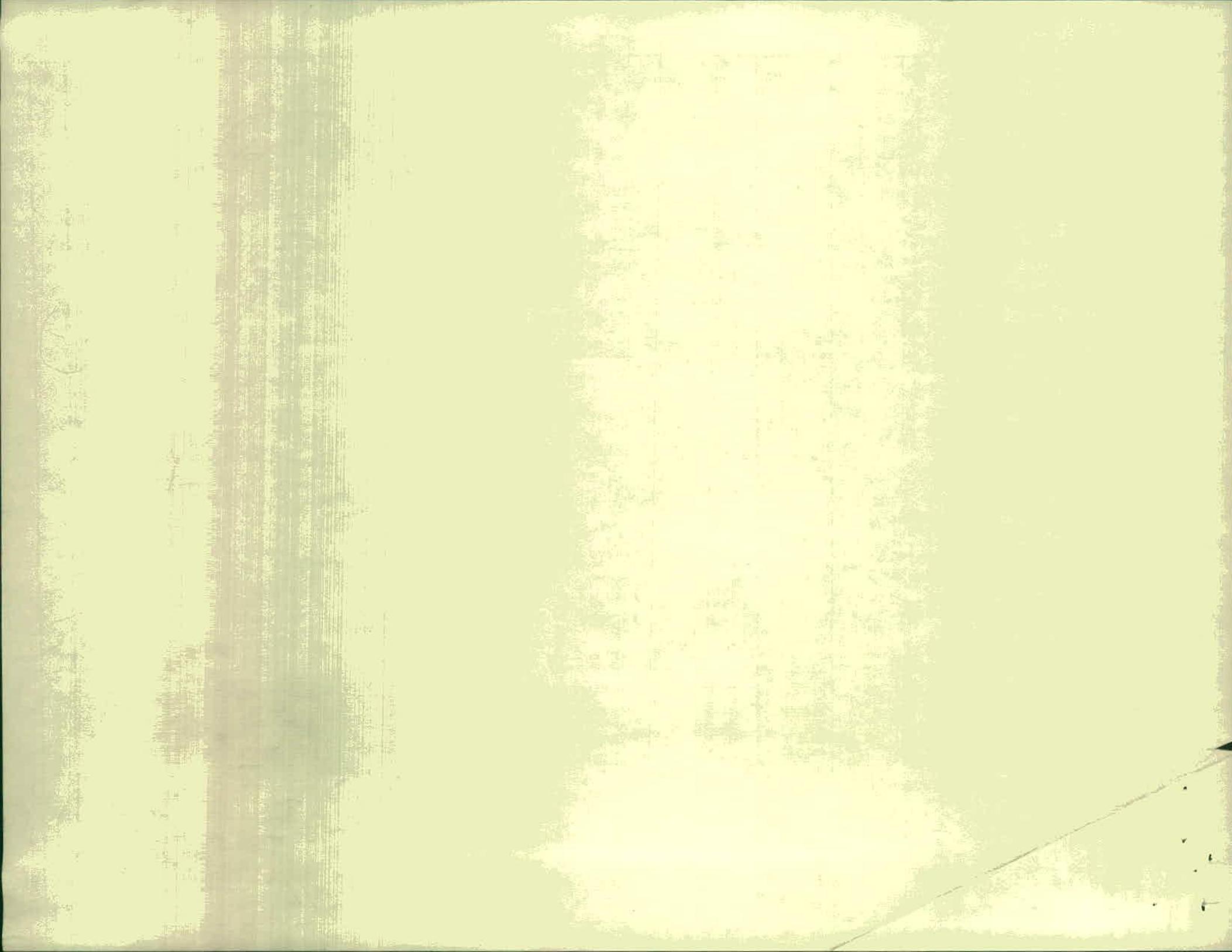


Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING
Comment: PURCHASING Issue P/O: <u>5935</u> a) Extrude as per Dwg D2244 b) Material: 6061-T6 (QQ-A-200/8) c) Minimum yield tensile strength = 35 ksi d) Minimum ultimate tensile strength = 38 ksi e) Minimum elongation = 8% f) Order at 116" long g) Caradon Indalex Tool # MH-18865 h) To be packed per DSK 066 i) Pull test to ASTM standard B221 required. j) Material certification is required		
<i>C 08/03/18</i> <i>(110)</i>		

2.0	D2244116P	Step Extrusion
Comment: Qty.: 1.0000 Each(s)/Unit Total : 110.0000 Each(s) STEP EXTRUSION		

3.0	PACKAGING 1	PACKAGING RESOURCE #1
Comment: PACKAGING RESOURCE #1 Receive & Inspect For Transit Damage Ensure certification are attached		

4.0	QC6	DIMENSIONAL CHECK
Comment: DIMENSIONAL CHECK Check Pull test per Dwg D2244 for compliance page attached. Check hardness with Webster tester		



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Drawing Name: STEP EXTRUSION

Job Number: 38023

Part Number: D2244116

Job Number:



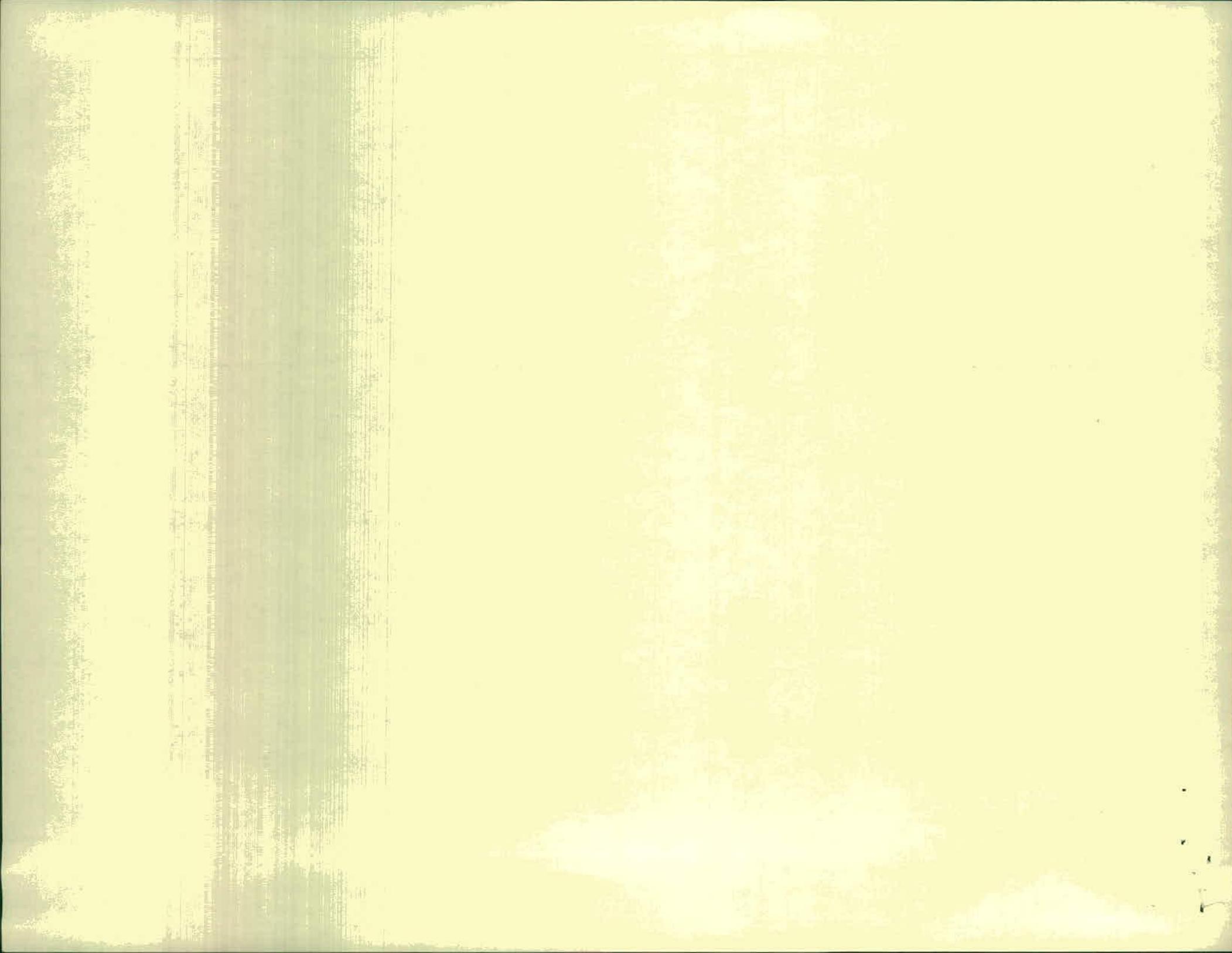
Seq. #:	Machine Or Operation:	Description :
5.0	PACKAGING 1	PACKAGING RESOURCE #1
		HAL 04/08 08/04/20 Hm. 44 John 81
Comment:	PACKAGING RESOURCE #1	
Identify and Stock (in feet)		
Location:	G A	
6.0	QC21	FINAL INSPECTION/W/O RELEASE
		08/05/01 08/04/20 08/04/20 08/04/20
Comment:	FINAL INSPECTION/W/O RELEASE	

Job Completion



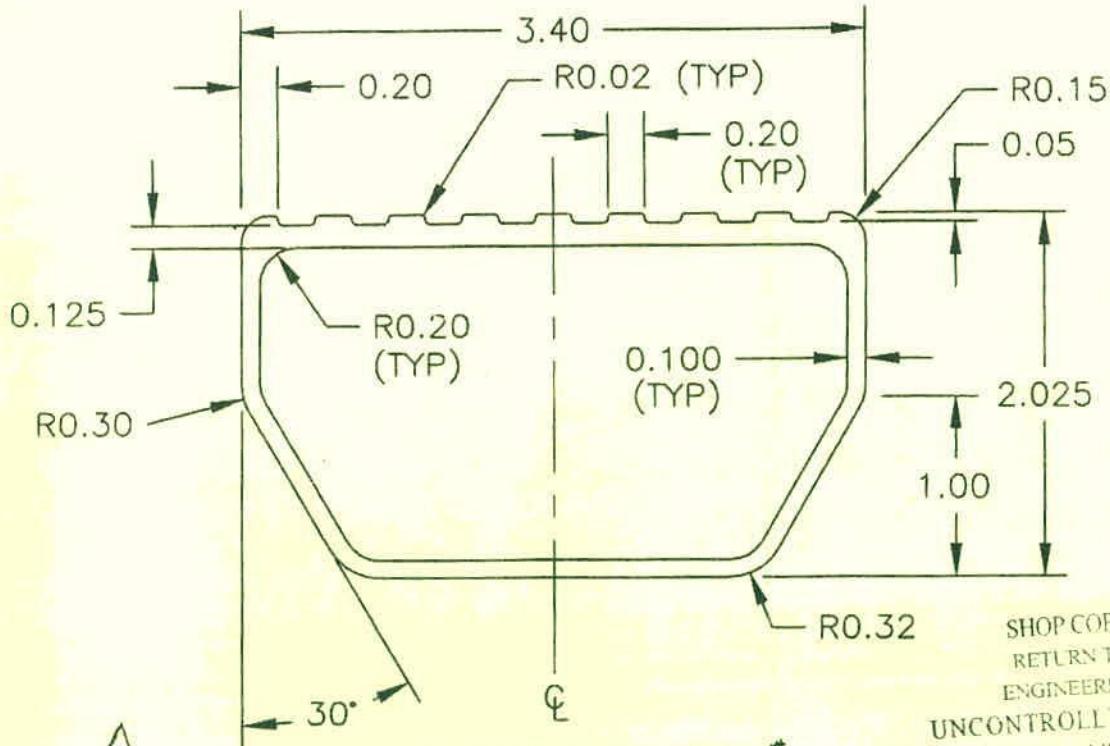
108.01.22

U 08.05.01 44



DART

DESIGN BW	DRAWN BY <i>CL</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <i>RE</i>	APPROVED <i>MM</i>	DRAWING NO. D2244
DATE 98.11.18		REV. D SHEET 1 OF 1
		SCALE 1:1
A	94.07.05	NEW ISSUE
B	94.07.11	REDESIGNED
C	94.08.08	REDESIGNED
D	98.11.18	REMOVED 6005A MATERIAL INCORPORATED DEO 9081
D1	01.04.17	ADDED DIE # <i>CP</i>

RELEASED
18/11/25 RE

MANUFACTURED USING CARBON INDALEX DIE # MH-1886

PART NUMBER D2244-XX.X
XX.X IS CUT LENGTH IN INCHES

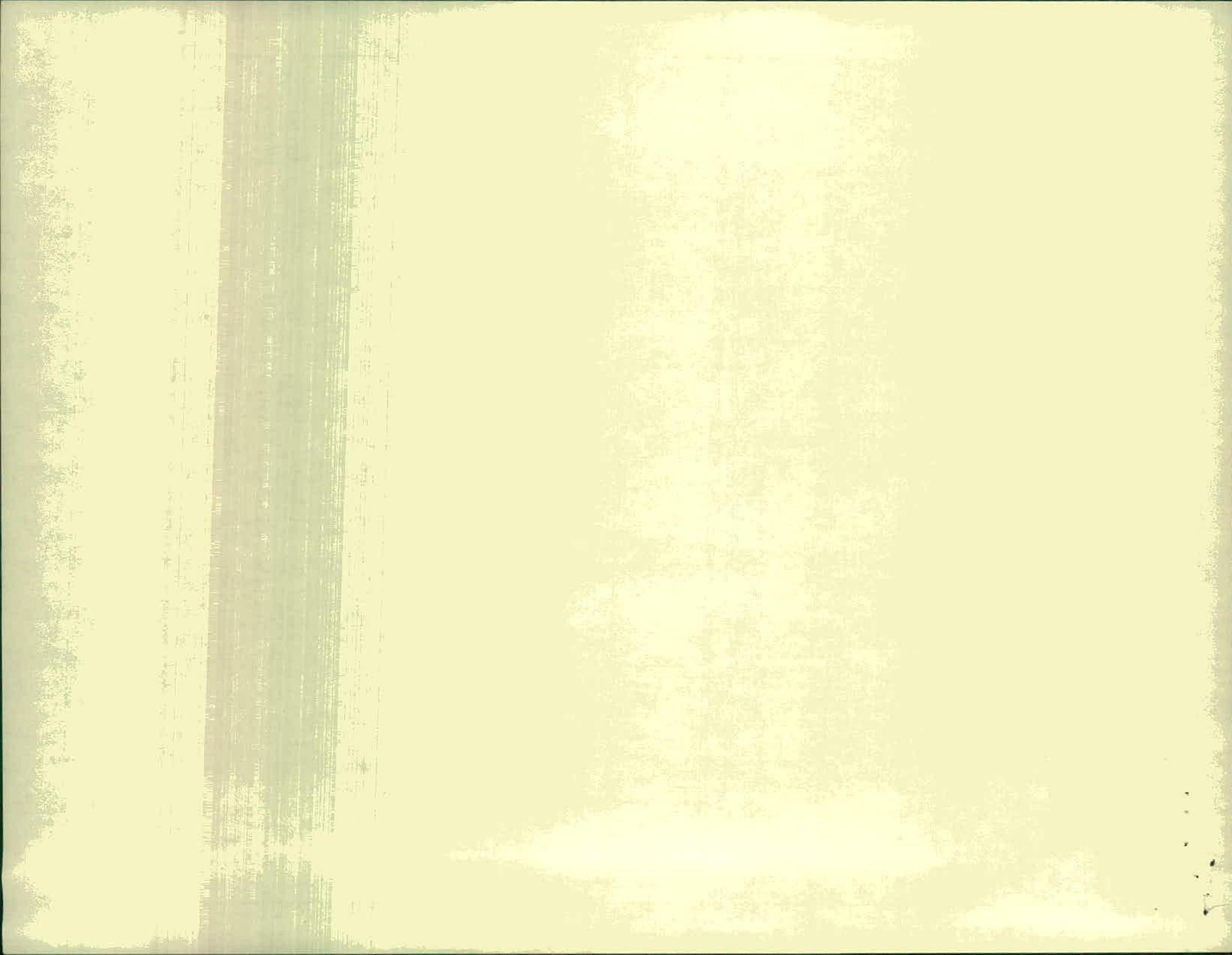
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 38023

MATERIAL: 6061-T6 (QQ-A-200/8)

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE MINIMUM MECHANICAL PROPERTIES STATED BELOW:

MINIMUM TENSILE YIELD STRENGTH = 35 ksi
 MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
 MINIMUM ELONGATION = 8%

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED



DART AEROSPACE LTD.
 1270 ABERDEEN STREET
 HAWKESBURY, ONT

EXPÉDIE PAR AVION

 EXPÉDITIONS SPÉCIALES
 SPECIAL METHODS INC.

P/S# : 655439

 NOTRE NUMÉRO DE COMM.
 OUR ORDER NO.

8032434 1

K6A1K7

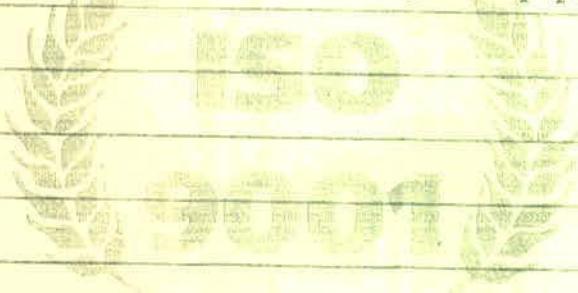
CUSTOMER P.S.T.: *6122-5207

N° DU CLIENT CUST NO.	TPS G.S.T.	TAXE DE VENTE PROV. PROV. SALE TAX	N° DE COMMANDE CUST ORDER NO.	DATE DE COMMANDE ORDER DATE	NOTRE DATE D'EXPÉD. OUR SHIP. DATE	DATE D'ARRIVAGE ARRIVAL DATE
201355	XXXXXX		5935	8/03/18	8/03/18	

VENDEUR SALESMAN	EXPÉDIE PAR SHIP VIA	PAYE PPD	PIEGE C.C.	CAD CUT	FAB F.O.E.	ENTREPÔT WAREHOUSE	ATELIER WORKSHOP	CLIENT CUSTOMER
51		<input checked="" type="checkbox"/>						

N° ITEM NO.	COMMANDÉ / ORDERED	N° DE MATERICE INDALEX DIE NO.	DESCRIPTION DU CLIENT CUSTOMER DESCRIPTION	ALLIAGE ET TREMPAGE ALLOY AND TEMPER	LONGUEUR LENGTH	PRIX UNITAIRE UNIT PRICE
1	F EXTRUDE ONLY DUE=2008/04/18 04-18 1 639 110 MH 18865 D2244116P STEP EXTRUSION BUNDLE= 823012	6061	T6	2946		

We hereby certify that the material supplied meets the chemical properties as published by the Aluminum Association, and requirements of our Quality procedures



COMMANDÉ / ORDERED	CEMETTE EXPÉDITION THIS SHIPMENT	MONTANT AMOUNT

1	262	44 POIDS EN KGS
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S. Gleeson



Rapport des propriétés mécaniques Mechanical Properties Test Report

Client / Customer : DART AEROSPACE LTD

Adresse / Address : 270 ABERDEEN STREET
 HAWKESBURY ONT,
 K6A 1K7

commande Indalex / Indalex order # : 8032434

bon de commande / Purchase order # : 5935

de matrice / Die # : MS 18865 Description : Step Extrusion

Alliage & trempage / Alloy & temper : 6061 T6

Contrôle / Control # : 71006-2

Coulée / Cast # : 43000

	Min.requis Min.required	Résultat actuel Actual results
Tension ultime Ultimate stress (psi)	38 000	39649
Contrainte élastique Yield stress (psi)	35 000	35688
% élongation dans 2" % elongation in 2"	8	12
Dureté Rockwell E (hrc) Rockwell E Hardness (hrc)	88 @ 100	89

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0,20 - 0,60	0,35 Max	0,10 Max	0,10 Max	0,45 - 0,90	0,10 Max	0,10 Max	0,10 Max
6005	0,60 - 0,90	0,35 Max	0,10 Max	0,10 Max	0,40 - 0,60	0,10 Max	0,10 Max	0,10 Max
6005A	0,68 - 0,72	0,15 - 0,27	0,08 - 0,12	0,20 - 0,24	0,48 - 0,52	0,03 Max	0,05 Max	0,03 Max
6061	0,40 - 0,80	0,70 Max	0,15 - 0,40	0,15 Max	0,80 - 1,20	0,04 - 0,35	0,25 Max	0,15 Max
6381	0,7 - 1,3	0,5 Max	0,10 Max	0,40 - 0,80	0,40 - 0,80	—	0,20 Max	0,20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221 excepté pour la section 8.2 (nombre de spécimen) et AMS QQA 200/8 excepté pour la section 4.2.3.1 (nombre de spécimen) qui sont déterminés par les exigences du client.

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221 except for section 8.2 (number of specimen) and AMS QQA 200/8 except for section 4.2.3.1 (number of specimen) which is determined by customer requirement.

Sincèrement vôtre,
 Yours truly,

date : 2008-04-09



Bruno Morency
 Technicien de la qualité
 Quality technician

Indalex Limited

